REMARKS/ARGUMENTS

Claims 1 and 2 are rejected under 35 USC 102 (b) as being anticipated by Hara et al. The Examiner also rejects claims 4 and 6-8 under 35 U5C 103(a) as being unpatentable over Hara et al. Hara is cited to show the inventions except for the claimed compositions. The examiner holds that the selection is obvious (without evidence of this conclusion, in this art)

According to the invention as claimed in claim 1, the electromagnetic coil in the pilot clutch is surrounded with stationary ferromagnetic material over its rear, inner peripheral and outer peripheral sides, namely over its sides other than its magnetic force exerting side which is its front side. Further, the stationary ferromagnetic material is covered with stationary nonmagnetic material.

The present inventors ascertained through several simulations that surrounding an electromagnetic coil with a ferromagnetic material increases the force of attraction of the electromagnetic coil to a pilot clutch. According to these simulations, the electromagnetic force of one coil which is

surrounded with stationary ferromagnetic material over its rear, inner peripheral and outer peripheral sides is about twice as strong as that of another coil which is surrounded with stationary ferromagnetic material over its rear and outer peripheral sides or only its inner peripheral side. It is on the basis of these findings that the present invention was made.

In contrast, in Hara at al., the yoke 43 made of low-carbon steel (ferromagnetic material) surrounds the rear and inner peripheral sides of the electromagnetic coil 63 but not the outer peripheral side of the coil, so that the electromagnetic force of the coil is much weaker than that of the present invention case. Thus Hara et al is missing an important feature of the invention.

Further, in the Office Action, the Examiner regards the K in Hara at al. as a nonmagnetic material. However, as described in column 6, lines 56-60 of Hara et-al., the K is a nitrided layer of low-carbon steel 31b or 43, which is a ferromagnetic material. Therefore, this basis for the rejection is unsupported.

Since Hara et al. fails to teach each element of present claim 1 as discussed above, claim 1 is not anticipated by Hara et al. For the same reason, claim 2 is also not anticipated.

Claims 4 and 6-8 are rejected as obvious over Hara et al.

Since they all depend from claim 1 they include all of the features of claim 1. The examiner has cited no basis for concluding that the missing features described above are obvious, based on Hara et al or other knowledge in the art. Therefore, it is submitted that claims 4 and 6-8 are allowable at least for the reason claim 1 is allowable as well as for the feature they recite.

In view of the above, it is submitted that the present invention is not shown or suggested by the cited art. Withdrawal of the rejections and allowance of the application are respectfully requested.

Respectfully submitted,

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